REMARKS

Claims 1-17 are now pending in the application. Claim 1 is amended. Claim 17 is added. The specification is also amended. No new matter is presented. Pending claims 1-14 and 16 stand rejected under 35 U.S.C. § 102 and 103. Applicants acknowledge the Examiner for indicating that claim 15 recites allowable subject matter. The foregoing amendments and the following remarks are considered by Applicants to overcome each rejection raised by the Examiner and to place the application in condition for allowance. An early Notice of Allowance is therefore requested.

I. Claim Objections

Claims 1-3, 5, 6, and 12-16 are objected to for containing informalities. Applicants respectfully request that the objection to these claims be withdrawn in view of the following comments. Claim 1 provides a diaphragm plate which is movable between a passive position, in which it lies next to the valve opening and release the valve opening, and an active position in which is partially covers the valve opening. The diaphragm plate is defined in the specification and the claims to represent a plate with a hole passing through it. Although it may not be commensurate with the accepted definition, it is submitted that the Applicants may define the structures of the invention as provided in the specification. In the present specification, the diaphragm plate as provided in the claims is characterized appropriately in the specification. It is known that the applicant may be his own lexicographer, therefore, since Applicants have defined the claimed diaphragm plate in the specification, Applicants request the withdrawal of the objections to claims 1-3, 5, 6, and 12-16.

II. Rejection Of Pending Claims 1-8, 12-14, and 16 Under 35 U.S.C. § 102(b)

Claims 1-8, 12-14, and 16 are rejected under 35 U.S.C. § 102 (b) as being anticipated by Trent et al. (U.S. Patent No.1,609,894). These rejections are traversed and believed overcome in view of the above amendments and the following discussion.

A. Summary of Cited References

Trent discloses a single valve having a number of plates with openings of different diameters, or a cut-off plate, which can be selectively positioned in the line of flow of fluid through valve, through the medium of an adjusting means operable exteriorly of the valve, thereby enabling the flow to be regulated and the rate of flow varied, or the flow completely cut off, without the necessity of opening or disconnecting any part of the supply system.

B. Argument

Amended claim 1 provides a vacuum valve with a completely closed state in which the valve plate is in its closed position and the diaphragm plate is in its active position. As a result, it is possible that starting from the completely closed state of the valve, the valve can be brought directly in its partially closed state in which the valve plate is in its open position and the diaphragm plate is in its active position. Thus, the valve can be changed between its closed state and its partially closed state without being in its completely open state in between.

In contrast, Trent discloses a valve comprising a number of plates 54, 55, 56, and 57 which are mounted on a shaft 37. The tumbler 42 and the finger 62 can be used to select one of these plates and by the rotation of the tumbler 42 carried through the slot 60 and into position between the wall 15 and the chamber 14 and the face 19 of the body 18 of the wedge 17. As a result, the stem 27 may be rotated to force the wedge downwardly and cause the

face 19 of the wedge to press against the plate. Only one of the plates 54, 55, 56, and 57 can be carried through the slot 60 and into the chamber 14 at a time. When the valve, starting from a state in which the closed plate 54 is clamped in place by the wedge body 18, it can be brought into a partially closed state. Furthermore, when the wedge is opened, and the closed plate 54 is carried into chamber 11, a different plate is then selected with an opening of a desired width. The plate 55 is then carried though slot 6 into chamber 40 and clamping it by the wedge body 18. During this process the valve assumes a completely open state and a state in which the fluid passage way 10 is open towards chamber 11.

In contrast to Trent, in the claimed invention, it is possible to change the flow through the valve from zero (completely closed state) to the valve which is defined by the diaphragm plate without having a maximum flow through the valve in between. Furthermore, the valve of Trent is not vacuum valve and would not be suited for vacuum applications. By clamping the plates 54, 55, 56, and 57 in place with the wedge body 17, a massive amount of particles would be produced within the vacuum region which would not be tolerable for vacuum applications. Therefore it is submitted that Trent fails to teach or suggest that the vacuum valve has a completely open state in which the valve plate is in its open position and the diaphragm plate is in its passive position, a completely closed state in which the valve plate is in its closed position and the diaphragm plate is in its active position and the valve plate is sealed relative to the valve body, and a partially closed state in which the valve plate is in its open position and the diaphragm plate is in its active position, wherein the vacuum valve has a reduced cross section compared to the completely open state. Accordingly, Applicants request the withdrawal of the rejection of claim 1.

Claims 2-8, 12-14, and 16 are dependent upon claim 1. Therefore, it is submitted that these claims recite patentable subject matter for at least the reasons mentioned above.

Accordingly, Applicants also request the withdrawal of the rejection of claims 2-8, 12-14, and 16.

II. Rejection Of Pending Claims 9-11 Under 35 U.S.C. § 103(a)

Claims 5-7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Trent in view of Geiser (U.S. Patent No. 6,431,518). The Examiner takes the position that the combination of Trent and Geiser teach and/or suggest all the features recited in claims 9-11. Applicants respectfully disagree

A. Summary of Cited References

Geiser discloses a vacuum valve having a valve housing. Moreover, Geiser discloses that when closing the vacuum valve proceed from the completely open position, the pistons of the first cylinder units 8 are initially actuated so that the valve plate 5 is displaced into the position that is located opposite the valve opening but is not yet pressed to the valve seat.

B. Argument

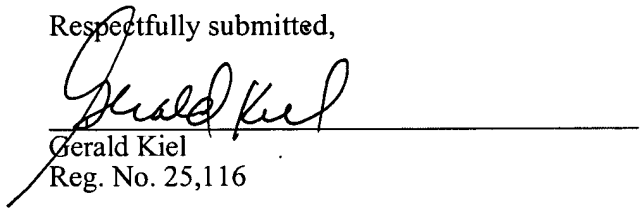
It is respectfully submitted that the combination of the cited references fails to teach or suggest all the features recited in claims 9-11. In particular, it is submitted that Trent fails to teach or suggest that the vacuum valve has a completely open state in which the valve plate is in its open position and the diaphragm plate is in its passive position, a completely closed state in which the valve plate is in its closed position and the diaphragm plate is in its active position and the valve plate is sealed relative to the valve body, and a partially closed state in which the valve plate is in its open position and the diaphragm plate is in its active position, wherein the vacuum valve has a reduced cross section compared to the completely open state.

It is respectfully submitted that Geiser fails to teach or suggest this feature. Therefore, it is respectfully submitted that claims 9-11 recite patentable subject matter for at least the reasons mentioned above. Accordingly, Applicants request the withdrawal of the rejection of claims 9-11.

IV. Conclusion

For the reasons presented above, claims 1-17 are believed by Applicants to define patentable subject matter and should be passed to issue at the earliest possible time. A Notice of Allowance is requested.

Respectfully submitted,



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